

Medicine in Australia: Balancing Employment and Life



MABEL Chief Investigators (from left): Dr Catherine Joyce, Professor Anthony Scott, Associate Professor Guyonne Kalb and Professor John Humphreys

Welcome to the seventh edition of *MABEL Matters*. Our exciting news is that we have been awarded \$2.5 million from the NHMRC for the new Centre of Research Excellence in Medical Workforce Dynamics. This signals the beginning of a new phase for the MABEL survey. The Centre will build important capacity in medical workforce research, and provides funding for a further five annual waves of MABEL until 2016. This success would not have been possible without the continuing support of the thousands of doctors who fill out the MABEL survey every year. We very much appreciate the time it takes to do this survey, and value highly the commitment shown by those completing the survey each year. We hope you will stay with us as MABEL enters this new phase. It is the longitudinal element that is the key and unique aspect of the MABEL survey. The award

In this issue...

New NHMRC Centre of Research Excellence in Medical Workforce Dynamics

MABEL used by Health Workforce Australia

MABEL assists rural medical workforce planning

MABEL progress

Come to the Inaugural MABEL Research Forum

Some recent publications

of the Centre of Research Excellence would also have not been possible without the hard work of our research team in analysing the data and turning it into policy-relevant evidence that is beginning to be used to inform medical workforce policies. Thanks also go to our Policy Reference Group members who have kept us informed of key issues in the medical workforce policy arena since MABEL began.

Keep in touch

You can easily keep in touch with us by visiting our website (www.mabel.org.au), following us on Twitter, LinkedIn and Facebook, and through our regular updates as they become available. We also have a MABEL group on LinkedIn where you can receive updates on research as it happens.



New NHMRC Centre of Research Excellence in Medical Workforce Dynamics

The new Centre of Research Excellence, funded by NHMRC from 2012, will support an additional five waves of the MABEL survey, giving a total of nine waves of annual data collection between 2008 and 2016. This builds on the previous NHMRC Health Services Research Grant that funded the first four waves of MABEL until 2011. The Centre will enable us to continue our research in the areas of medical workforce participation (working hours, exits, retirement), rural health workforce supply and distribution, and medical workforce career transitions (for example, specialty choice). In addition, there will be a renewed focus on knowledge exchange and impact, and on building capacity in health workforce research.



MABEL used by Health Workforce Australia

Researchers from the MABEL team were contracted by Health Workforce Australia (www.hwa.gov.au) to undertake two pieces of research as part of the National Health Workforce Planning and Research Collaboration. The first project, 'The Effect of Medical Graduate Expansion in Australia', used data from MABEL and from AIHW to examine the short-term effects of graduate expansion on the working patterns of junior doctors and their supervisors. Results showed little evidence of changes in working patterns, suggesting that the system has so far absorbed new graduates well. The second project, 'Patterns and Determinants of Medical and Nursing Workforce Exits', used data from MABEL and the Nurses e-cohort to describe and examine the factors influencing exit rates from medicine and nursing. This is useful for health workforce planning exercises that have in the past shown that small changes in exit rates can have a large influence on supply projections. Both reports will be available on the Health Workforce Australia website in the near future.

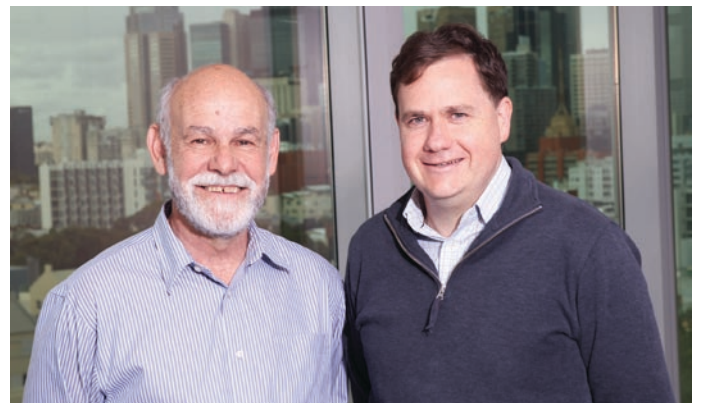
MABEL assists rural medical workforce planning

Rural doctors have been important contributors to the Medicine in Australia: Balancing Employment and Life (MABEL) study since its inception. Their support and continued involvement with MABEL is central in providing information that is crucial for improving the provision of health services to rural communities.

To date, MABEL has published more than six academic articles that focus specifically on doctors practising in rural and remote areas of Australia. Each publication provides rigorous baseline evidence on key workforce issues relating to rural practice. Specifically, these articles provided evidence showing that:

- rural GPs experience the same professional satisfaction as metropolitan GPs;
- the effect of the rural background in taking up rural practice is just as strong for GPs as Specialists;
- areas of workforce shortage in rural and remote Australia do not relate strongly with an area's environmental amenity;
- a range of factors are most important for rural workforce retention;
- rural doctors are characterised by diverse workloads and a high on-call workload; and
- a classification scheme based on rural medical workforce considerations would provide more effective and equitable resource allocation for rural doctors (see the case study below).

Further research to be completed soon includes an examination of preferred job characteristics of rural GPs, preferred retention strategies of rural GPs, and personal and



Professor John Humphreys (left) and Dr Matthew MGrail (right) are conducting research into the rural medical workforce using MABEL.

professional satisfaction levels of geographically-restricted international medical graduates.

While academic publications to date provide 'snapshots' from only one year of the survey, it is important to note that MABEL collects data annually. Due to the longitudinal nature of the MABEL study, future work incorporating subsequent waves of data will enable researchers to gain a significantly better understanding of the rural workforce issues as they change over time. Its longitudinal design has the advantage of enabling research to move from simply measuring associations towards examining causal effects.

Significant among the work that MABEL researchers will be undertaking soon is an examination of rural workforce issues that is simply not possible from one-off surveys. Most notable is an investigation of the patterns of and reasons for job mobility of rural doctors—that is, the movement into, within and out of rural areas. MABEL will provide data not previously available that will allow researchers to explain the key determinants of rural doctors' geographic mobility and retention.

The continued participation of rural doctors in the MABEL study will be critical to the success of this research. The MABEL team is extremely grateful for this ongoing support and the time that these doctors spend in completing the annual survey.

Case study: Developing an improved system for allocating rural medical workforce incentives

The ASGC-Remoteness Area classification currently used by the Australian Government to guide the allocation of workforce incentives is not widely supported by rural doctors. By correlating MABEL data relating to the characteristics of workforce practice with readily available Australian Bureau of Statistics data, a more equitable classification for eligibility of rural workforce incentives was devised. Our evidence demonstrates that a classification predominantly based on town size rather than location (remoteness) is significantly more sensitive to geographical differences relevant to rural practice. It is shown in Table 1 that all five indicators, each known to be strong determinants of rural recruitment and retention, consistently and strongly increase as the town size decreases. Our study confirms that this association with town size is significantly stronger than the equivalent association with remoteness, with the exception of small rural towns with populations of less than 5,000.

Table 1: Characteristics of rural practice against six community size levels

Community size	Average hours per week (excluding on-call)	% with more than one on-call per week	% undertaking public hospital work	% identifying inadequate educational facilities	% experiencing lack of employment for partners
Metropolitan (>100K)	38.6	9%	6%	10%	19%
Large regional (50–100K)	41.2	19%	10%	7%	14%
Large rural (15–50K)	43.9	26%	27%	23%	24%
Medium rural (5–15K)	45.2	46%	51%	40%	37%
Small rural (1.5–5K)	45.6	50%	57%	46%	45%
Very small rural (<1.5K)	45.1	57%	51%	60%	49%

Source: Humphreys J, McGrail M, Joyce C, Scott A, Kalb G, 2012, 'Who should receive recruitment and retention incentives? Improved targeting of rural doctors using medical workforce data', *Australian Journal of Rural Health*, vol. 20, pp. 3–10.

MABEL progress

- We would like to thank all the doctors who made time to complete the Wave 4 survey in 2011; we continue to achieve an excellent response. Of those doctors who filled out the Wave 1 (2008) survey, almost 80 per cent



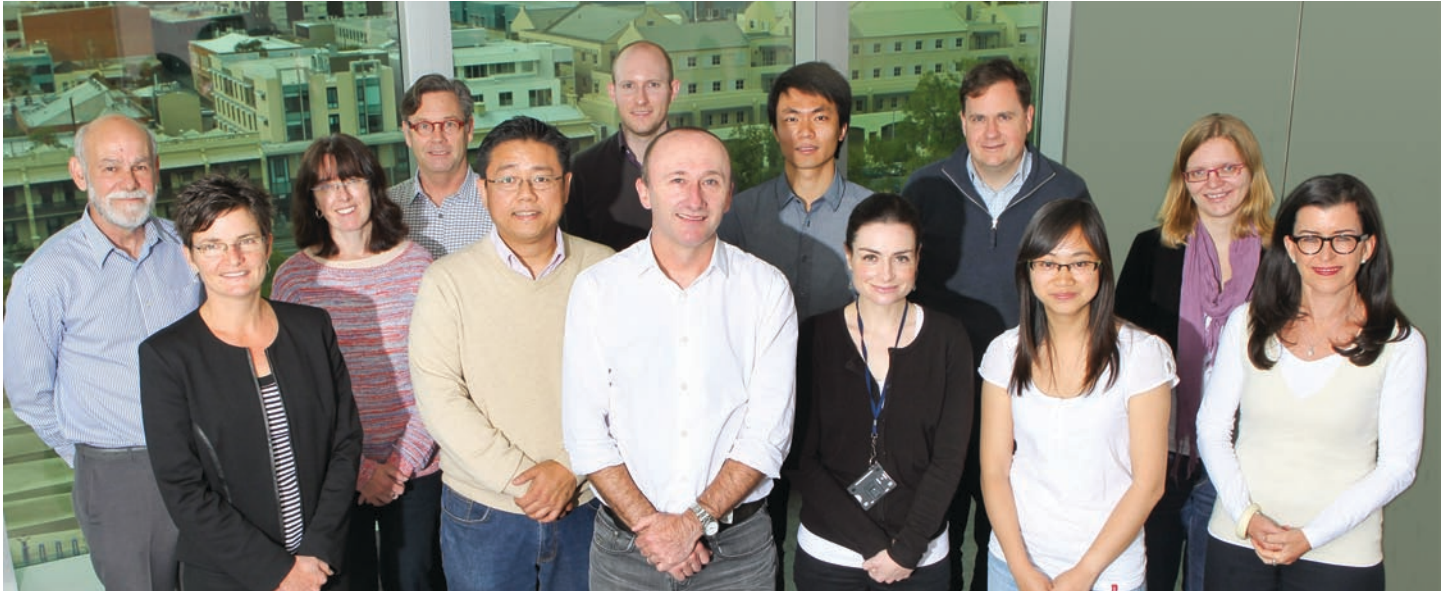
Anne Leahy (Survey Manager) and Wenda Yan (Data Manager)

filled out the Wave 2 survey, and of this group almost 82 per cent completed the Wave 3 (2010) survey. Eighty-four per cent (to date) of those who completed the Wave 3 (2010) survey also completed the Wave 4 (2011) survey. These responses are higher than those achieved for similar surveys in other countries.

- The total numbers of doctors completing the survey each year were 10,498 in 2008, 10,304 in 2009, 9,949 in 2010, and 9,763 (not finalised) in 2011. These figures include new cohorts of mainly junior doctors in 2009, 2010 and 2011.
- Our response rate for each new cohort of doctors joining MABEL doubled from 19 per cent in 2008 to 38 per cent in 2009, reached 31 per cent in 2010, and was 35 per cent (not finalised) in 2011.
- De-identified data from Waves 1 to 3 are now available for other researchers to use. We currently have 11 external users of the data.

Come to the Inaugural MABEL Research Forum

As MABEL enters its next phase with the Centre of Research Excellence, and as the amount of research coming from MABEL increases, we have decided to hold the Inaugural MABEL Research Forum. This forum will showcase the research output from our research team, PhD students, and our 11 external users of MABEL data. The forum will enable research results to be discussed with a range of stakeholders, including participating doctors and representatives from our 40 endorsing organisations. The forum is planned for late April 2013. Go to our website or follow us on Twitter, LinkedIn or Facebook to keep informed of further details.



Some members of the MABEL research team

Front row (from left): Dr Catherine Joyce, Dr Terence Cheng, Professor Anthony Scott, Emma Craw, Dr Jinhu Li, Anne Leahy
 Back row (from left): Professor John Humphreys, Associate Professor Guyonne Kalb, Danny Hills, Dr Peter Sivey, Wenda Yan, Dr Matthew McGrail, Dr Barbara Hanel

Some recent publications

Cheng T, Scott A, Jeon S, Kalb G, Humphreys J, Joyce C, 'What factors influence the earnings of GPs and medical specialists in Australia? Evidence from the MABEL survey', *Health Economics*. (Accepted 25 July 2011.)

Hills D, 'Submission to the Parliament of Victoria inquiry into violence and security arrangements in Victorian hospitals', 27 June 2011.

Humphreys J, McGrail M, Joyce C, Scott A, Kalb G, 'Who should receive recruitment and retention incentives? Improved targeting of rural doctors using medical workforce data', *Australian Journal of Rural Health*. (Accepted 2 December 2011.)

McGrail M, Humphreys J, Joyce C, Scott A, Kalb G, 'How do rural GPs' workload and work activities differ with community size compared with metropolitan practice?', *Australian Journal of Primary Health*, <<http://dx.doi.org/10.1071/PY11063>>. (Accepted 23 August 2011.)

McGrail M, Humphreys J, Scott A, 'Submission to the Partyline newsletter (*National Rural Health Alliance*)', no. 42, November 2011, pp. 26–7, <http://nrha.ruralhealth.org.au/cms/uploads/publications/partyline-42-nov-2011_07.pdf>.

Russell D, McGrail M, Humphreys J, Wakerman J, 'What factors contribute most to the retention of general

practitioners in rural and remote areas?', *Australian Journal of Primary Care*. (Accepted 2 November 2011.)

Scott A, Jeon S, Joyce C, Humphreys J, Kalb G, Witt J, Leahy A, 'Online, paper or mixed? A randomised trial and economic evaluation of the effect of response mode on response rate, response bias, and item non-response in a survey of doctors', *BMC Medical Research Methodology*, 2011;11:126, <<http://www.biomedcentral.com/1471-2288/11/126>>.

Work-in-progress: recent conference presentations

Cheng T, Joyce C, Scott A, 'An empirical analysis of dual medical practice in Australia'.

Hills D, Joyce C, Humphreys J, 'Workplace aggression in Australian clinical medical practice – the need for action and change'.

Kalb G, Cheng T, Kuehnle D, Scott A, Jeon S, 'Non-pecuniary and pecuniary factors in physician labour supply'.

McIsaac M, Scott A, Kalb G, 'The geography of GP supply using small area data and spatial econometrics'.

Schurer S, Kuehnle D, Cheng T, Scott A, 'Skills, practice style or children: what explains the gender wage gap of GPs?'.

Sivey P, Scott A, Gravelle H, Yong J, 'Does competition influence the prices charged by GPs?'.

**This newsletter was prepared by Professor Anthony Scott, Anne Leahy and Nellie Lentini.
 Copyright: © 2012 Melbourne Institute of Applied Economic and Social Research, The University of Melbourne
 MABEL staff photos by David Crosling (FotoGroup)**